Since it was just before sunset, the old, "Hey boss, are my lights on?" wouldn't quite fit. I flew away glad to be alive but angry at having been shot again off cat 4 without signaling I was ready to go.

Once safely on deck, I tried to find out exactly what the heck was going on with the shooters and cat 4. They were waiting for me. They had realized something was wrong with the catapult and downed it immediately after my launch. They troubleshot the catapult for several hours to determine why it prematurely had fired. Finally, after we went to the ILARTS room and reviewed the tapes, we discovered what had happened. Immediately after the tension signal had been given, the deck-edge operator leaned forward and pressed the catapult-fire button!

Or, after waiting for the call, "305, turn on your lights," responding with, "I'll turn my lights on when I'm ready to go flying!"

The deck-edge operator was given the final ready signal, but the sun was at his back and washed out the final ready light. The operator then reached down with his hand to shield the light from the sun, so he could see whether the final ready light was lit. He broke his own habit pattern by moving his hand, and, instead of only shielding the light, he pushed the catapult fire button out of habit. The shooter still was giving the run-up signal and never had touched the deck to signal the deck-edge operator to fire the catapult. From his peripheral vision, the shooter noticed the aircraft being shot.

Down at mid-rats, several of us mulled over the situation and came up with some lessons learned. With so many people monitoring the launch to verify the catapult is not fired until everything and everyone (including the pilot) is ready, it is impossible for this to happen, right? Wrong.

In the first instance, the yellowshirt, the shooter, the boss, and everyone else involved in the launch, all failed to notice my lights were off and shot me anyway. The second incident shows just how one person's habit pattern being disturbed could cause a mishap. Once you are put into tension, be ready to fly—immediately! On both launches, only a few seconds had elapsed between tension and being shot off the cat.

Make sure your takeoff checklist is complete (without the wipeout) before taxiing into the shuttle. As a personal technique, I will perform that checklist after final check and ready to taxi. By doing this, you already have done the checklist at least once before getting to the shuttle. The big items that will keep you alive are: flaps-half, trim 12, 30, 30, 30, and 16-degrees nose up (or as dictated by weight and asymmetry), and radar altimeter set to 40 feet.

Use the same scan down the cat every time. Airspeed should be the first priority on the stroke. In a Hornet, airspeed with more than three digits in the HUD usually indicates a good shot. Know what a good shot feels like, but never rely on seat-of-the-pants feel alone. Your instrument scan will save your life, so trust the instruments. Too many pilots have flown into the water because of spatial disorientation caused by a night-catapult shot. If your inner ear and instruments disagree, trust the instruments, climb away safely, and then work out your vertigo.

Finally, remember that thorough and correct habit patterns, knowledge of NATOPS procedures, and total situational awareness may save your life someday.

Lt. Hartkop flies with VFA-15.

Analyst comments: A common misperception is "three digits and I'm flying"—everyone knows the Hornet cannot fly away at 100 knots, yet it appears so on every cat shot. This is because of the inherent lag in the pitot-static system. The performance charts show a 110-knot stall speed for max, and 119-knot stall speed for mil with zero bank angle (with a –402 engine, at 44,000 pounds gross weight). Be sure to check fly-away speed on every shot.

Lt. Cads Bartel is the FA-18 analyst at the Naval Safety Center.

Letters

I'm a retired USAF F-16 driver who has been reading *Approach* since the 1950s and subscribing to it for over 20 years. I thoroughly enjoy your fine magazine, but the February 2002 issue finally has moved me to ask a question that has been bothering me for quite some time. Why does it seem that Navy pilots are so reluctant to declare an emergency? This wasn't a big deal in the Air Force.

An excellent case in point was found in the February article, "Wait! SOP Says No Compound-Unrelated Emergencies." The author says, "...we really had a multi-system compound emergency, at night, with a 500-foot ceiling." The ship (an unidentified cruiser) was giving them all sorts of grief, pushing them to resume the ASW mission, apparently unaware of their true situation. But the author doesn't say they declared an emergency, which, I assume, would have gotten the ship off their back while they worked the problem.

Over the years, I have concluded that using the "E" word over the radio must be seriously frowned upon in naval aviation. In countless *Approach* articles, the pilots and aircrews did not declare it. So I'm finally asking the experts.

LtCol. Hank Kramer, USAF(Ret.)

You raise an interesting question. Are naval aviators reluctant to declare an emergency? Aircrew study the NATOPS emergency-procedures section and carry the pocket checklist on flights to assist during emergencies. The aircrew also can discuss their emergency situation with squadron reps, wing and other ship personnel. The decision to declare an "E" naturally sets a lot of wheels into motion, all with the sole intent to help the aircrew. So, why hesitate to make the call? Are LtCol. Kramer's observations valid? Send comments to: jstewart@safetycenter.navy.mil.—Ed.

Mishap-Free Milestones

VP-5 24 years (146,000 hours)

VAQ-142 5 years (7,291 hours)

VAQ-133 6 years (8,049 hours)

VP-47 29 years (176,000 hours)

HMT-302 14 years (80,000 hours)